Claims

1. Shydroxyalkylamide having the general Formula I:

$$R_1$$
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2

to Collegiand Ruis a linear or

I

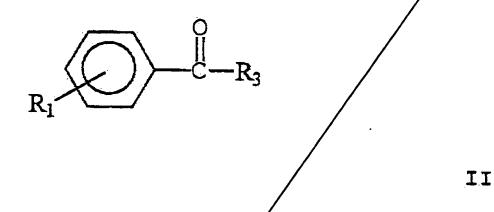
where R_1 is H or a linear or branched C_1 to C_1 alkyl and R_2 is a linear or branched C_1 to C_5 alkyl.

ß-hydroxyalkylamide as claimed in Claim 1, characterized by the fact that R₁ is H, t-butyl, i-propyl or pentyl and is located in the para position to the CO group.

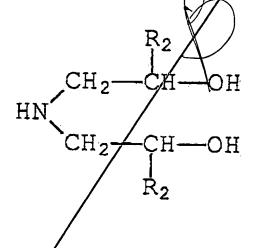
3. $\[\]$ \(\text{S-hydroxyalkylamide as elaimed in Claim 2, characterized by the fact that R₁ is H and R₂ is CH₃.



Process for the production of ß-hydroxyalkylamides as claimed in at least one of the Claims 1 to 3, characterized by the fact that a carboxylic acid derivative having the general Formula II:



where R_3 is halogen or OR_4 , whereby R_4 stands for a linear C_1 to C_5 alkyl, is reacted with an alkanol amine having the general Formula III:



III

and where R₁ and R₂ are defined as indicated above.

- 5. Process as claimed in Claim 4, characterized by the fact that a carboxylic acid derivative having the general Formula II where R₃ is a halogen is reacted at -10 to 25 °C with the alkanol amine having the general Formula III.
- 6. Process as claimed in Claim 5, characterized by the fact that benzoyl chloride is used as the carboxylic acid derivative and diisopropanol amine as the alkanol amine.
- 7. Process as claimed in Claim-4, characterized by the fact that a carboxylic acid derivative having the general Formula II with R₃-OR₄, where R₂ is as defined above, is reacted at 25 to 150°C with an alkanol amine having the general Formula III.
- 8. Process as claimed in at least one of the Claims 4 to 7, characterized by the fact that the carboxylic acid derivative having the general Formula II and the alkanol amine having the general Formula III are reacted in a solvent with vigorous agitation or stirring.
- 9. Process as claimed in at least one of the Claims 4 to 8, characterized by the fact that aromatic hydrocarbons such as benzene, toluene or xylene and/or ether are used as the solvent.

- 10. Process as claimed in at least one of the Claims 4 to 9, characterized by the fact that the alkanol amine is presented first and the carboxylic acid derivative is added with vigorous agitation or stirring.
- 11. Use of the ß-hydroxyalkylamide as claimed in one of the Claims 1 to 3 as a cross linker for polymers.
- 12. Use of the ß-hydroxyalkylamide as claimed in one of the Claims 1 to 3 as a cross linker for powder coats.
- 13. Use as claimed in Claim 10, characterized by the fact that it is used as a cross linker for polyester powder coats.
- 14. Use as claimed in Claim 11, characterized by the fact that a mixture of ß-hydroxyalkylamide and another cross linker selected from the ß-hydroxyalkylamides and/or epoxies is used as the cross linker.

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